

## September Meetings

### Dates & Times

Matinee, 2:30 p.m., Wednesday, September 9, 1981

Evenings, 8:00 p.m., Wednesday and Thursday, September 9 and 10, 1981

### Place

May Treat Morrison Auditorium

### Speaker

David Cavagnaro

### Subject

"Spring Comes to Alaska"

Spring burst forth this year in Alaska in a mere seven days. The land was transformed from melting snow and the bareness and brownness of spring thaw to the full lushness and greenness of summer — every day new flowers appeared until the high mountain slopes were carpeted with color.

Photographer, writer, teacher and biologist, David Cavagnaro, who is familiar to many Academy members, was in Alaska from mid-May to early June and photographed many of the species people journey to Alaska to see, particularly in Denali Park. His slide/lecture will feature many of the tiny flowers and plants of the arctic valleys and slopes, and some of the fauna, including arctic wolves, snowshoe hares and Dahl sheep. This look at spring in Alaska is not a trip to the wilder part of the state but rather an intimate examination of that part which is accessible to anyone.

Your membership card admits you through the main entrance at Cowell Hall for the evening presentation and through Cowell Hall and Wattis Hall entrances for the matinee. Please be prepared to show your card once again at the auditorium door for the matinee presentation.

PLEASE NOTE: On September 8 the Academy returns to its normal hours which are 10 a.m. until 5 p.m. each day.

## Special Exhibits



Early *Sunset* cover  
by Maynard Dixon

### MAYNARD DIXON: Images of the Native

**American** will continue through October 18 in the Atholl McBean and Patricia Price Peterson Galleries. This comprehensive and beautiful collection of the works of the great Western artist includes 119 paintings and sketches from the years between 1900 and 1940, and an audio-visual program which examines his life.

A 96-page slipcased and hardbound exhibition catalogue with over 40 beautiful color plates is for sale at \$20.00, and a special exhibition poster entitled "The Wise Men" can be purchased for \$6.00 Both are available at the Nature Company Museum Shop at the Academy. Members will receive their usual 10% discount.

Two subjects of interest and concern to all bay area residents are the commercial fishing industry and the problem of our diminishing farmlands. **The Fishing Fleet: Changing Times, Changing Faces**, (through September 20) uses models of fishing boats, vivid color photos, artifacts and an old-world fishing boat to give you both the historical and commercial views of the fishing industry in the bay area, and **Endangered Harvest** incorporates farm animal cut-outs, color photos of local produce, Joe Carcione on tape and a game you can play into an exhibit which tells of the state of agriculture in the nine bay area counties. Through November 8 in Lower Cowell Hall Gallery.

**Exploring the Deep Frontier: The Adventure of Man in the Sea** will continue through September 7.

## Morrison Planetarium

### New planetarium sky show inspired by the Voyager journeys to begin on September 18!

In 1977, two Voyager spacecraft, were launched on an incredible journey to the outer solar system and the stars. In addition to their scientific instruments, each Voyager carries a time capsule of recorded pictures and sounds of the planet Earth. What have the electronic eyes of Voyager seen so far on their remarkable journey? And what if someday intelligent beings elsewhere in the galaxy find one of the Voyagers and decipher its sounds and pictures? To find out see **The Voyager Legacy**, beginning on September 18, everyday at 2:00 p.m., Saturday and Sunday at 12:30, 2:00 and 3:30 p.m., and Wednesday and Thursday at 7:30 p.m.

**Islands in the Sky** will continue through September 13. *Performances through September 7* will be Saturday through Tuesday at 12:30, 2:00 and 3:30 p.m., Wednesday and Thursday at 11:00 a.m., 12:30, 2:00, 3:30 and 7:30 p.m., and on Friday & Labor Day at 11:00 a.m., 12:30, 2:00 and 3:30 p.m. *Performances from September 8 through 13* will be everyday at 2:00 p.m., Saturday and Sunday at 12:30, 2:00 and 3:30 p.m., and Wednesday and Thursday at 7:30 p.m. **THE PLANETARIUM WILL BE CLOSED SEPTEMBER 14 THROUGH 17.**

**Exploring the Skies of the Season** — an enjoyable tour of the heavens over San Francisco can be seen every Saturday and Sunday at 11:00 a.m. Please use your planetarium passes for free admission to all of these shows.

## Light Shows

Light up your life with a visit to Eye See the Light, Inc's three dazzling presentations!

*Through September 7:* Wednesday at 5:00 and 9:00 p.m.; Thursday at 5:00, 9:00 and 10:30 p.m.; Friday and Saturday at 5:00, 7:30, 9:00 and 10:30 p.m.; Sunday at 5:00, 7:30 and 9:00 p.m. Please call 387-6300 for exact show titles and times.

*Beginning September 8, showtimes will be:*

**Lights Fantastic** - Friday at 7:30 p.m.  
Saturday at 5:00 and 7:30 p.m.  
Sunday at 5:00 p.m.

**Rock Fantasy** - Friday and Saturday at 9:00 and 10:30 p.m.  
Sunday at 7:30 p.m.

**Spotlight: Journey** - Thursday and Sunday at 9:00 p.m.

For more information, call 387-6300. Tickets



are available through BASS at 835-3849. Admission is \$3.75 for adults and \$1.75 for seniors (65 and over) and children under 10. Members are reminded that this is **not** a regular planetarium show, so your complementary passes are **not** usable for this attraction.

#### Junior Academy Begins Fall Schedule!

It's back to school time and once again the Junior Academy is offering a wide range of Fall classes. Don't miss registration day, Saturday October 3, from 10:00 a.m. until 3:00 p.m. in the Goethe room. Registration will continue in the Junior Academy October 5 through 9, each day from 10:00 a.m. until 3:00 p.m.

To receive a Junior Academy program of classes call 221-5100 ext. 221 for a brochure and further information.

#### ENDANGERED HARVEST

Wednesday, September 16, 1981 at 8:00 p.m. in the Morrison Auditorium with Larry Orman.

Ten years ago, America's grain elevators were bursting with unsold wheat and other products, and farmers were being paid not to plow land. Four years later, there was almost no land standing idle, and the subsidy programs were ended. From a time of surplus we have made a change and have begun to reach the limits of our farmland frontier.

The San Francisco Bay Area is a perfect example of why the U.S. is facing a potential crisis. In 40 years we have lost almost three-quarters of a million acres, but we have two million acres left to protect. Larry Orman, the Executive Director of People for Open Space (a Bay Area conservation organization) will describe recent events on the national and state levels affecting the farmland issue, and will explain why the Bay Area's crop and grazing lands are important to protect. This lecture is being held in conjunction with the exhibit "Endangered Harvest" on display in Lower Cowell Hall through November 8, and is free of charge.

#### THOR HEYERDAHL and DONALD JOHANSON in Berkeley This Fall

Two special lectures co-sponsored by the California Academy of Sciences, the Committee for Arts and Lectures, and the L.S.B. Leakey Foundation are scheduled this fall in Berkeley. *Both lectures will take place in the Zellerbach Auditorium at the University of California at Berkeley beginning at 8:00 p.m.*

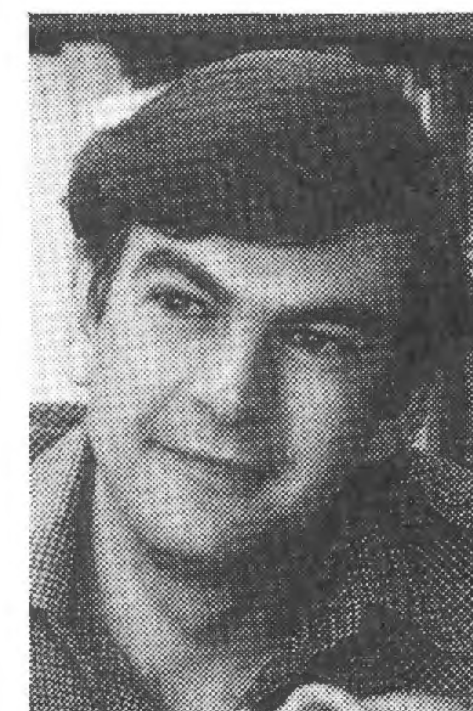
##### Tuesday, October 13, 1981

Dr. Thor Heyerdahl, anthropologist, explorer and author, will present a slide/lecture on "Early Man and the Ocean". The theme of this lecture is the role of deep-sea navigation in the spread of culture throughout the ancient world.



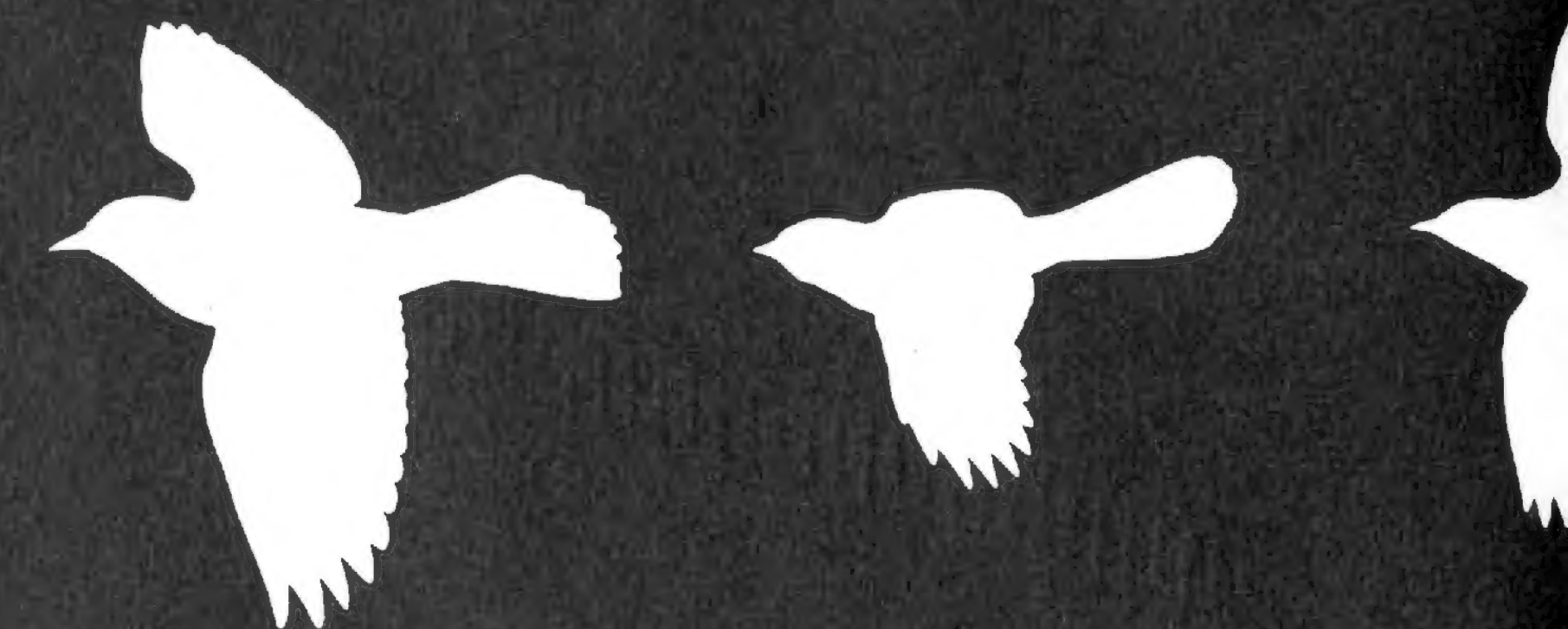
##### Tuesday, November 17, 1981

Dr. Donald C. Johanson, Curator of Physical Anthropology and Director of Scientific Research at the Cleveland Museum of Natural History, will speak on "Lucy and the Evolution Revolution". In his slide/lecture Dr. Johanson will discuss his remarkable discoveries in the search for evidence of man's origin and evolution.



Tickets are available from the University Box Office, University of California Berkeley, CA 94720. Make checks payable to REGENTS, UNIVERSITY OF CALIFORNIA, and include a stamped, self-addressed envelope. For telephone orders call (415) 642-9988, Monday through Friday from 10 a.m. until 5:30 p.m. Tickets for each lecture are \$6 for general admission; \$3.00 for students (unreserved seating); and \$25 for patrons. Patron tickets include special seating, receptions at the University Art Museum to meet Dr. Heyerdahl and Dr. Johanson and round-trip bus transportation from San Francisco. The bus leaves promptly at 7:00 p.m. from 2880 Broadway, and returns at approximately 11:00 p.m.

*Please be sure to specify which lecture you wish to attend.*



#### WINGS: A One-Day Symposium

Saturday, October 24, 1981 Beginning at 9:00 a.m.  
Morrison Auditorium

Fluttering, singing and soaring; birds at one time or another seem to capture the imagination of everyone. In fact, there are over 20 million birders in the U.S. alone!

To every birder the name of Roger Tory Peterson is a familiar one. Join Dr. Peterson and a host of other speakers for a one-day symposium to explore the fascinating subject of birds.

This program is offered in association with a prestigious collection of works by Roger Tory Peterson in an exhibition entitled "Portrait of a Bird Watcher" opening October 22 in Lovell White Hall. See your October "Newsletter" for details.

#### P R O G R A M

**9:00 - 9:45 "Dinosaurs, Birds and the Evolution of Flight"**  
*Dr. Kevin Padian, Department of Paleontology, University of California, Berkeley*

We take a look at current theories of the origin of birds and how they might have developed flight: Was it from the ground up or from the trees down? Did it happen the same way for birds, bats and pterosaurs?

**9:45 - 10:30 "Darwin's Finches"** *Dr. Robert Bowman, Department of Biology, San Francisco State University*  
With motion pictures, slides and sound recordings, Dr. Bowman will describe some of the major evolutionary adaptations in Darwin's finches of the Galapagos Islands. We will look at structural and behavioral modifications that have made these small birds famous out of all proportion to their size.

**10:30 - 10:45 Break**

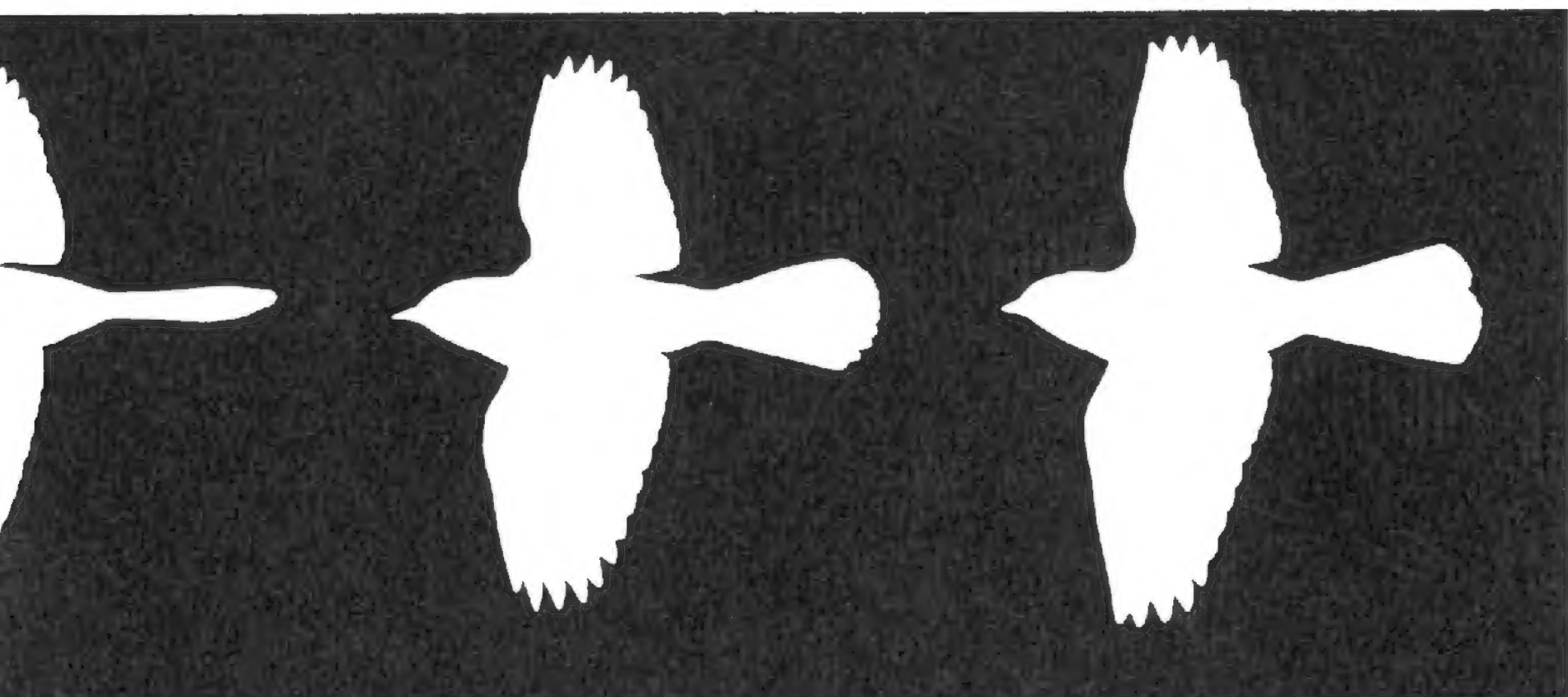
**10:45 - 11:30 "Avian Song Dialects or... Do Birds Learn to Whistle?"** *Dr. Luis Baptista, Chairman, Department of Birds and Mammals, California Academy of Sciences*

Many species of birds learn their songs from adults in the population. Since these songs are passed down by vocal tradition, local dialects evolve. With an emphasis on Dr. Baptista's research with White Crowned Sparrows, we will learn about the evolution of dialects and hear many examples of these "variations on a theme."

**11:30 - Noon Film: "Bird Brain"** (27 mins.)

Intriguing account of recent research on bird migration. II-





illustrates several navigational methods that birds employ including the use of coastal routes, the sun and stars, and even the earth's magnetic field.

**Lunch Break**

**1:00 - 1:30 "Feathers, Eggs and Graceful Flight"**

A multi-media presentation. The slides of David Cavagnaro and Frans Lanting illustrate the wondrous, aesthetic appeal of birds.

**1:30 - 2:15 "Sex and the Breeding Bird, or One Path to Better Birdwatching"** Bob Stewart, Point Reyes Bird Observatory

The "how to's" of birdwatching will be included as we learn about the sex roles of California birds, including species that have precocious young, several types of altricial strategies and, finally, the parasitic species in California. Both serious birders and interested amateurs will enjoy this presentation.

**2:15 - 3:00 "Penguins"** Dr. Roger Tory Peterson, artist, photographer, author, conservationist, and naturalist  
There are 17 kinds of penguins, and Roger Tory Peterson has seen and photographed them all. According to Dr. Peterson, "Penguins are habit forming. I am an addict". Join us for a slide/lecture view of these endearing "little fellows in dress suit."

**3:00 - 3:15 Break**

**3:15 - 4:00 "Birds in the Art of the Primitive World"**  
Dr. Jerome Feldman, Department of Art History, University of Hawaii

Birds have extraordinary meanings in almost every "primitive" society. They have been used as totems, clan emblems, prestige items, and insignias of power. We will look at many examples of artwork from around the world, including one of the most interesting manifestations of birds in "primitive" art: the cult of the "bird-men" of Easter Island, where men are thought to become part bird for one year.

**4:00 - 4:45 "Dreams Take Wing"** Dr. Tom Crouch, Curator, National Air and Space Museum, Smithsonian  
From earliest times, man has envied the flight of birds. Ancient Egyptian bird carvings demonstrate a rough understanding of aerodynamics. Beginning with these earliest examples, we will cover the Age of DaVinci and other early modern thinkers, and the 19th century with such inventive greats as George Cayley and the Wright Brothers, as we learn how man has utilized his observation of birds to become airborne.

**4:45 Film: "Early Whirlies"**

A compilation of early films of the humorous and highly imaginative flying machines invented by man in his first attempts to become airborne. Provided by the Smithsonian National Air and Space Museum.

**Ticket Information and Reservation Form**

Tickets are available for the symposium **Wings** with this registration form. Reservations will be accepted in order of receipt and unfortunately telephone reservations cannot be accepted for this event. Tickets will be sold at the door on a space available basis.

For further information please call the Education Office at (415) 221-5100.

**TICKET ORDER FORM**

Please mail this form with check, made payable to the CALIFORNIA ACADEMY OF SCIENCES, and a self-addressed, stamped envelope to:

WINGS  
California Academy of Sciences  
Golden Gate Park  
San Francisco, CA 94118

**Price:** Members \$7.00  
Non-Members \$15.00

\_\_\_\_\_  
Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
Zip Code

\_\_\_\_\_  
Daytime Telephone #

Tickets @ \$ 7.00 \_\_\_\_\_

Tickets @ \$15.00 \_\_\_\_\_

Total Amount Enclosed \_\_\_\_\_

**NO REFUNDS/NO EXCHANGES**

**Education & Travel**

**Darwin's Galapagos**

October 28 - November 10

Participants will cruise in comfort aboard the *M.V. Santa Cruz* as they explore those "living laboratories of evolution" known as the Galapagos Islands. Costs range from \$2100 - \$3400 for the cruise. Air fare is currently \$863. For information, please call the Academy Travel Office at (415) 221-5100.

**Baja California Overland** - wait-list only

November 7 - 14

**Sea of Cortez Cruise**

November 14 - 21

Botanist Annetta Carter will lead one of our most popular tours south of the border to beautiful Baja California. The Overland portion of the trip has filled. There are, however, seven spaces available on the Sea of Cortez cruise. You may fly from San Francisco to La Paz to join fellow Academy members for a fabulous 6-day trip to many of the southern islands of the scenic Sea of Cortez. Travel is aboard the comfortable *Baja Explorador*. Cost for the cruise is \$879 and airfare is currently \$216. For information on this special cruise or to wait-list for the Overland portion of the trip, please call the Academy Travel Office at (415) 221-5100.

**Coral Seas Cruising Expedition**

November 15 - December 13

Dr. John McCosker will lead members on a spectacular cruise aboard the *Lindblad Explorer* to Australia's Great Barrier Reef. This trip is co-sponsored with the Oceanic Society. Costs range from \$4910 to \$8130 for the cruise. Air is \$2093 at current G.I.T. rates. For information, call the Academy Travel Office at (415) 221-5100.

**Land of the Maya**

January 9 - 26

Ancient Mayan ruins will be the focus of this archaeological exploration of Yucatan and Chiapas. Dr. Dorothy Washburn will lead members to Uxmal, Chichen Itza, Tulum, Palenque, and more. Some time will be spent in the lovely beach resort of Cancun and in the highlands of Chiapas at San Cristobal de las Casas. Optional extensions to Oxaca and Mexico City are available. For information, call the Academy Travel Office at (415) 221-5100.



### Baja California Circumnavigated

January 23 - February 6

The *M.V. Northwest Explorer* has been reserved for Academy members for a second annual cruise around the Baja California peninsula. Led by Aquarium Director, John McCosker, and Ornithology Curator, Luis Baptista, the Academy group will see herds of elephant seals and the whale lagoons of the west coast, plus birds, fishes and bizarre plants of the Sea of Cortez. Costs for this extraordinary cruise range from \$2520 - \$3500. For information call the Academy Travel Office at (415) 221-5100.

### Sailing the Caribbean

February 4 - 15

Dr. Sylvia Earle will lead a tour to the exotic Leeward and Windward Island chain in the Caribbean. Sailing aboard the luxurious square-rigged tall ship, the *Sea Cloud* to Antigua, St. Lucia, Bequia, Mustique, Tobago Cays, and Iles des Saintes, members will discover the lush beauty, colorful towns, and remote sea coves ideal for snorkeling, in this lovely island chain. This trip is co-sponsored with the Stanford Alumni Association. For information, call the Academy Travel Office at (415) 221-5100.

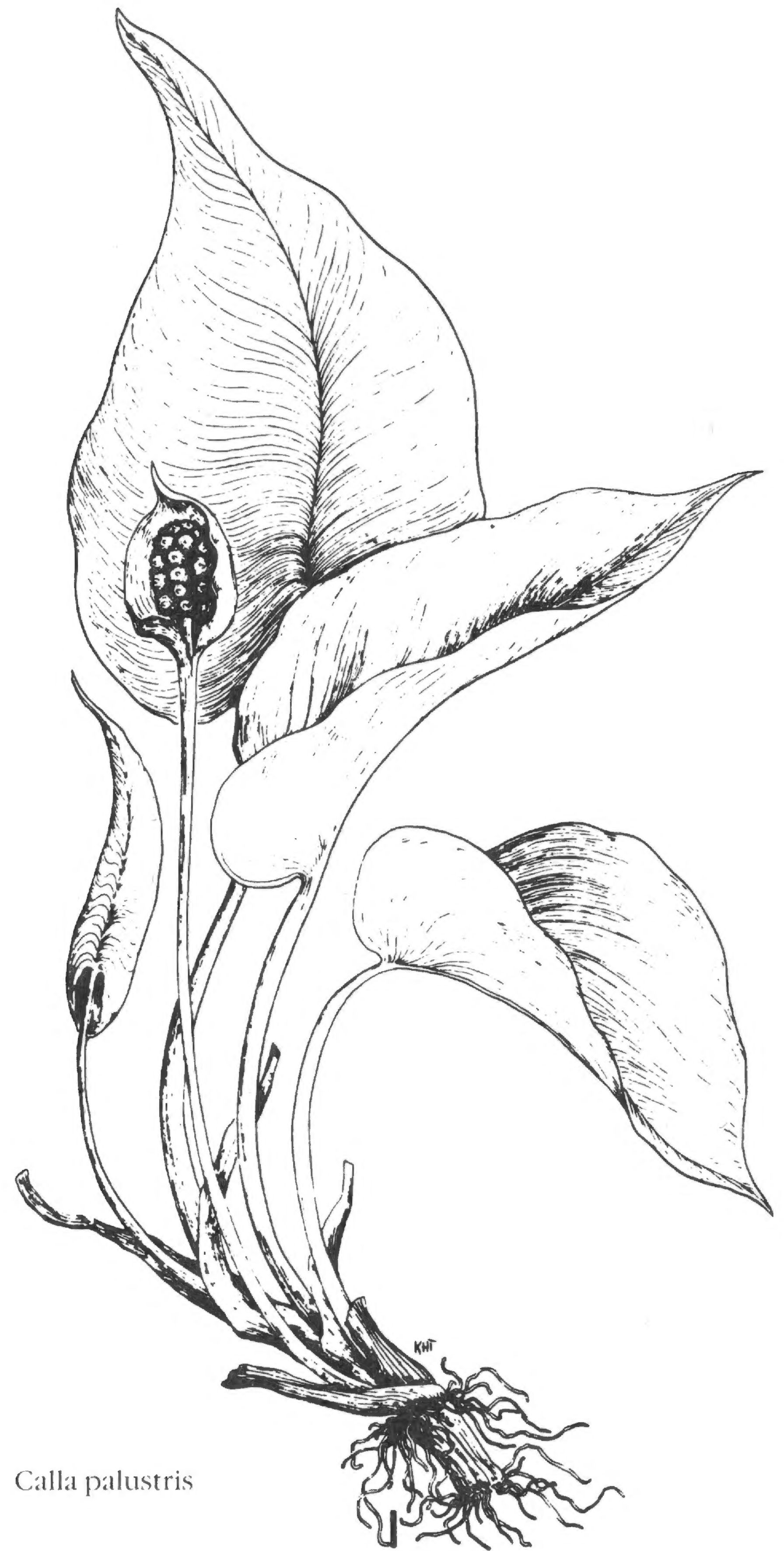
### Baja California Gray Whale Expedition

February 4 - 12

This 9-day cruise along the west coast of Baja California follows the migration of the California gray whales. Passengers aboard the *Qualifier 105* will visit the San Benitos Islands, San Ignacio Lagoon, Cedros Island, and San Martin Island. There will be numerous opportunities to photograph and observe the abundant wildlife of the area. For information, please call Nature Expeditions International at (415) 494-6572

No. 501

Golden Gate Park, San Francisco, California 94118



*Calla palustris*

California  
Academy  
of Sciences  
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September, 1981

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